BookletChartTM



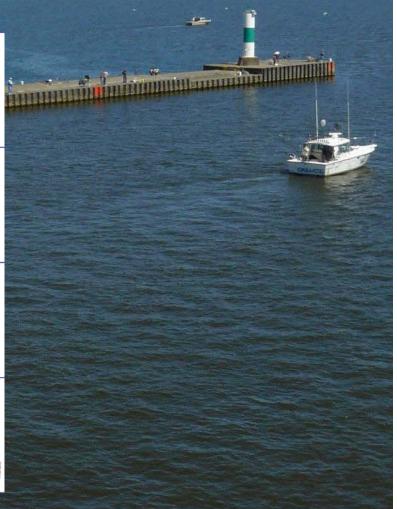
Puget Sound –
Shilshole Bay to Commencement Bay
NOAA Chart 18474

A reduced-scale NOAA nautical chart for small boaters When possible, use the full-size NOAA chart for navigation.



- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker





Published by the National Oceanic and Atmospheric Administration National Ocean Service Office of Coast Survey

<u>www.NauticalCharts.NOAA.gov</u> 888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart[™]?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=18474.



(Selected Excerpts from Coast Pilot)
Shilshole Bay is between Meadow Point and West Point. It is an open bight from which the Lake Washington Ship Canal is entered, and is the site of the largest marina in the Seattle area. Clay cliffs extend for about 0.5 mile S of the canal entrance. Golden Gardens Park, Seattle Department of Parks and Recreation is N of the marina and extends up to and includes Meadow Point.

Shilshole Bay Marina, the small-craft basin

just N of the canal entrance, is administered by the Port of Seattle. A 4,400-foot breakwater, marked at each end by a light, protects the basin on its W side. The basin has two entrances. In 2009, the controlling

depths were 14 feet in the S entrances, and 15 feet in the N entrance. There are berths at the concrete floats for 1,400 craft to 250 feet long, including a guest pier and transient berths. The marina can provide electricity, gasoline, bio-diesel (#1 and #2), diesel fuel, water, ice, marine supplies, and a pump-out station at the 600-foot pier at the midpoint of the basin. Two 3-ton hoists are at the S end, and one 3-ton and one 4ton hoists are at the N end of the basin. A 55-ton marine travel lift, for haul-out, is available at the boatyard at the S end of the basin. Dry storage is available for 82 boats on movable trailers at the N end of the marina. A boat launching ramp is located N of the marina in Golden Gardens Park. The marina can be contacted on VHF-FM channel 17. West Point, at the N entrance to Elliott Bay, is a low, sandy point which rises abruptly to an elevation of over 300 feet 0.5 mile from its tip. The edge of the shoal extending WSW from the point is marked by a lighted buoy. West Point Light (47°39'43"N., 122°26'09"W.), 27 feet above the water, is shown from a 30-foot white octagonal tower attached to a building on the end of the point; a mariner radio activated sound signal is at the station, initiated by keying the microphone five times on VHF-FM channel 81A. Prominent in the area are the sump tanks of a sewage treatment plant about 0.1 mile E of the light, a VTS antenna tower between the plant and the light, and a large white dome about 1 mile ESE of the light.

Alki Point, at the S entrance to Elliott Bay, is low with a small prominent wooded knoll about 80 feet high immediately back of it. E of the knoll, lowland extends for nearly 0.4 mile before rising to the high land extending S from Duwamish Head. Alki Point Light (47°34'35"N., 122°25'14"W.), 39 feet above the water, is shown from a 37-foot white octagonal tower attached to a building on the end of the point.

Elliott Bay indents the E shore of Puget Sound just N of Duwamish Head. The entrance is between West Point on the N and Alki Point 5 miles S. The bay proper, lying E of a line between Magnolia Bluff and Duwamish Head, has a width of about 2 miles and extends SE for nearly the same distance. The bay is deep throughout most of its area.

Magnolia Bluff, largely bare, light-colored, and rising in places to nearly

300 feet, extends along the N shore from West Point to Smith Cove. Fourmile Rock is 60 yards offshore, 1.7 miles SSE of West Point Light. A light is on the rock. A wreck, covered 56 feet, is about 0.5 mile W of Magnolia Bluff in about 47°38'25"N., 122°25'35"W. Elliott Bay Marina is located just W of Smith Cove (Pier 91) below Magnolia Bluff. A 2,700-foot breakwater, marked by private lights, protects the basin on its S side. The basin has entrances on the E and W ends and has a reported depth 23 feet in the approach with a depth of 10 feet alongside the berths. The marina can accommodate 1,200 vessels up to 200 feet long, including 20 transient berths; larger vessel moorage is at the E pier. Services available include: electricity, gasoline, diesel fuel, water, ice, pump-out facility, engine and electrical repair. A yacht chartering firm is on site. VHF-FM channel 78A is monitored and a heliport is located at the center of the breakwater. No commercial vessels, commercial work or major boat repairs are allowed.

Duwamish Head, 1.8 miles NE of Alki Point and rising to over 260 feet from the point, bounds Elliott Bay to the S. The bluff is tree covered, but is interspersed with houses. The lights of the houses along the beach and on the bluff are conspicuous at night. A shoal, extending over 0.2 mile N of the point, is marked by **Duwamish Head Light** and a mariner radio activated sound signal, initiated by keying the microphone five times on VHF-FM channel 83A.

U.S. Coast Guard Rescue Coordination Center 24 hour Regional Contact for Emergencies

RCC Seattle

Commander

13th CG District Seattle, WA (206) 220-7001

Table of Selected Chart Notes

Corrected through NM May 14/11 Corrected through LNM May 03/11

For Symbols and Abbreviations see Chart No. 1

NOTE D

Numerous uncharted sunken logs and stub piling are known to exist in this area.

The tidal current vectors shown on this charl (in green) represent the average maximum speeds of flood and ebb currents, and the direction of flow. The speeds are represented by the numbers shown, and the directions by the orientation of the vector arrows. The maximum speeds will vary through time. For exact predictions, consult the Tidal Current Table, Pacific Coast of North America.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on loating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notices to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 13th Coast Guard District in Seattle, Wash., or at the Office of the District Engineer, Corps of Engineers in Seattle, Wash Refer to charted regulation section numbers.

CAUTION //

A flashing red light on South dock Torpedo Station, and on a float opposite Battle Point indicates torpedo firing in progress.

ONUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas

Pipeline Area Cable Area

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when supporting transitions or travilion.

anchoring, dragging, or trawling. Covered wells may be marked by lighted or unlighted buoys.

RACING BUOYS

Racing buoys within the limits of this chart are not shown hereon. Information may be obtained from the U.S. Coast Guard District Offices as racing and other private buoys are not all listed in the U.S. Coast Guard Light List,

CAUTION

Mariners are warned to stay clear of the protective riprap surrounding navigational light structures shown thus:

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

NÓTE B CAUTION

Limits of Log Storage and Booming Grounds are subject to change.

HEIGHTS

Elevations of rocks, bridges, landmarks and lights are in feet and refer to Mean High Water. Contour and summit elevation values are in feet and refer to Mean Sea Level.

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges. COLEMAN FERRY TERMINAL FOG SIGNAL
The light showing fixed white and from is privately maintained and operated duving fog.

Mercator Projection Scale 1:40,000 at Lat. 47°28'N

North American Datum of 1983 (World Geodetic System of 1984)

SOUNDINGS IN FATHOMS (FATHOMS AND FEET TO ELEVEN FATHOMS) AT MEAN LOWER LOW WATER

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National

U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117. Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:

(Accurate location) o(Approximate location)

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.649 southward and 4.461" westward to agree with this chart.

Fixed and floating obstructions, some submerged, may exist within the magenta tinted bridge construction area. Marners are advised to proceed with caution.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Seattle, Wash

KHB-60

162.550 MHz

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

SOURCE DIAGRAM

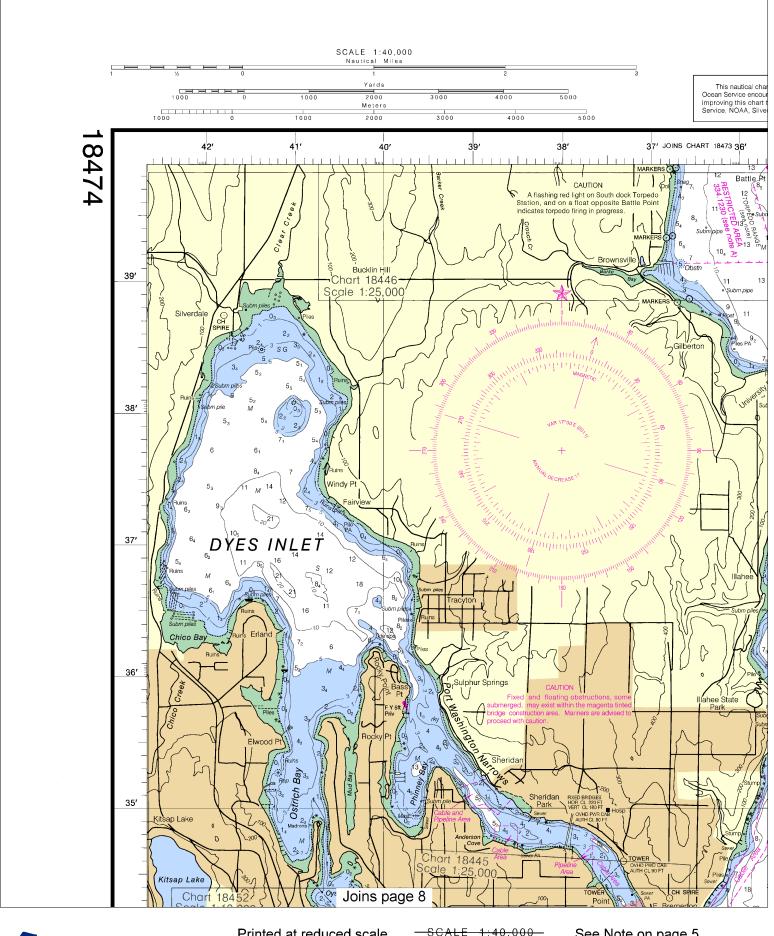
The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have beer banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

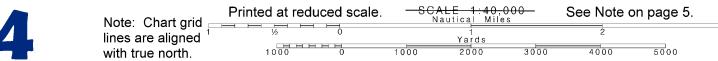
COLREGS, 80.1395 (see note A)

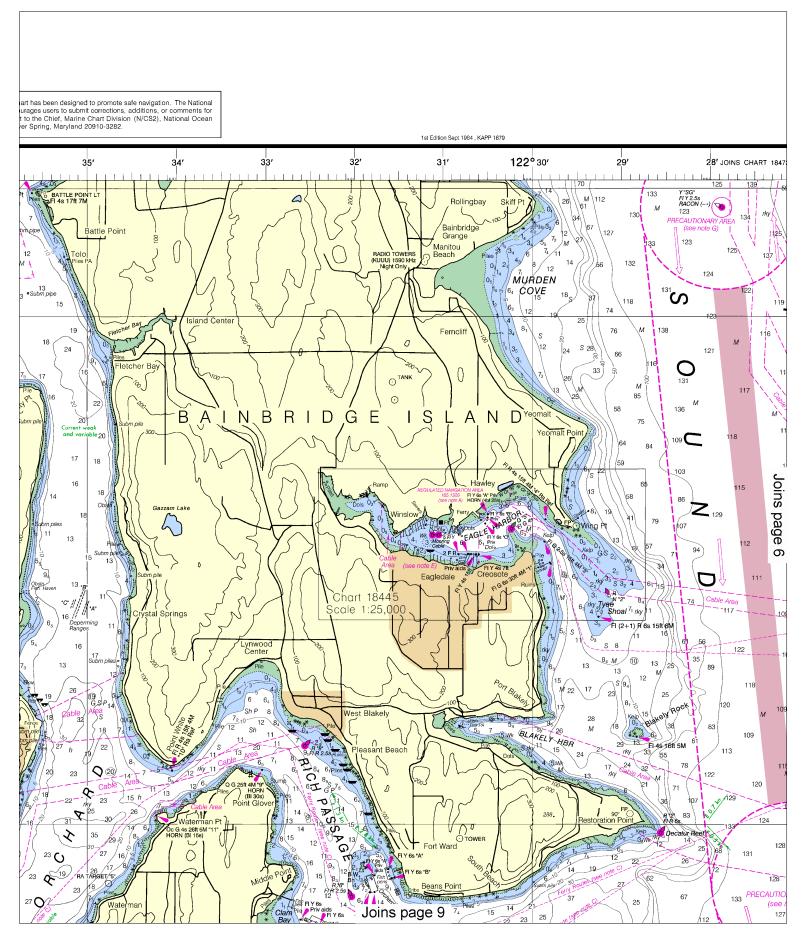
International Regulations for Preventing Collisions at Sea, 1972.
The entire area of this chart falls seaward of the COLREGS Demarcation Lin

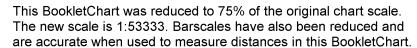
TIDAL INFORMATION				
HDALINFORMATION				
PLACE		Height referred to datum of soundings (MLLW)		
NAME	(LAT/LONG)	Mean Higher High Water	Mean High Water	Mean Low Water
Brownsville, Port Orchard	(47°39'N/122°37'W)	feet 11.8	feet 10.9	feet 2.9
Gig Harbor	(47°20'N/122°35'W)	11.8	11.0	2.8
Port Blakely	(47°36'N/122°31'W)	11.5	10.6	2.8
Bremerton, Port Orchard	(47°34'N/122°37'W)	11.7	10.9	2.9
Seattle, Elliott Bay	(47°36'N/122°20'W)	11.4	10.5	2.8
Tacoma, Commencement Bay	(47°16'N/122°25'W)	11.8	10.9	2.9

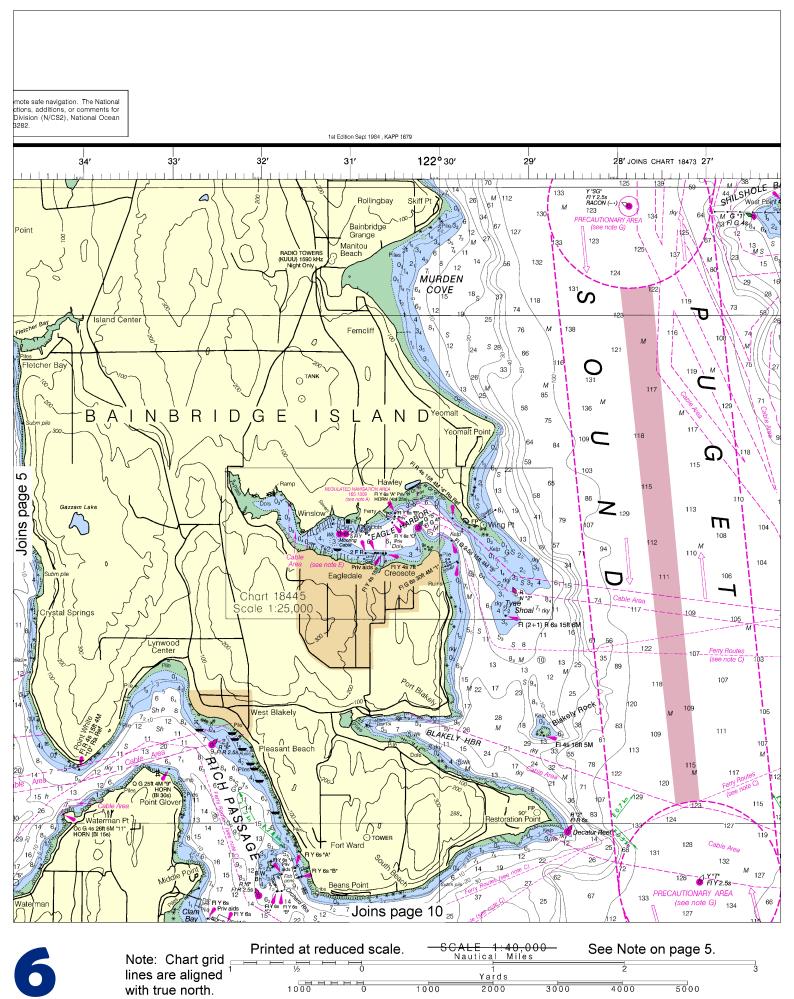
Dashes (- - -) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide pradictions, and tidal current prodictions are available on the internet from http://lidesandcurrents.noaa.gov. (Acr 2011).

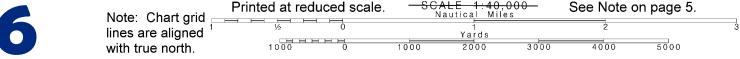






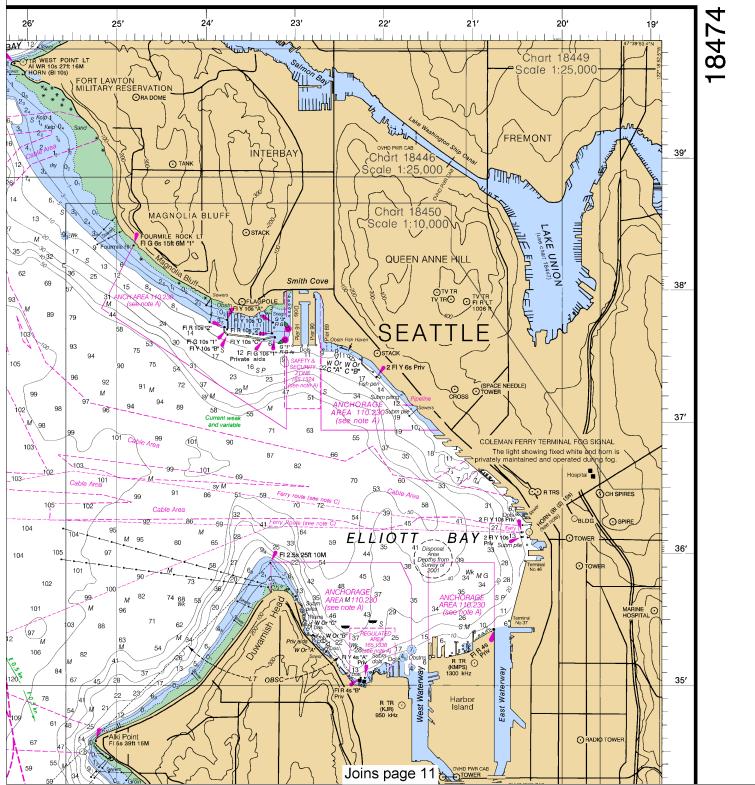






SOUNDINGS IN FATHOMS

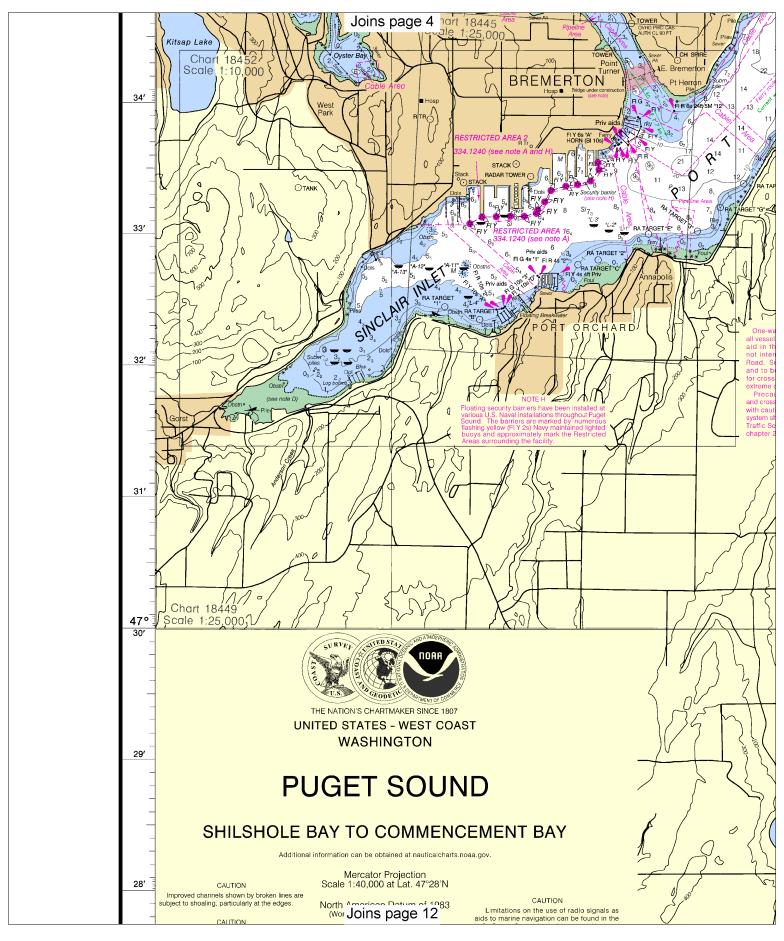
(FATHOMS AND FEET TO 11 FATHOMS)



This BookletChart has been updated through: Coast Guard Local Notice To Mariners: 5012 12/11/2012,

NGA Weekly Notice to Mariners: 5212 12/29/2012,

Canadian Coast Guard Notice to Mariners: 1012 10/26/2012.





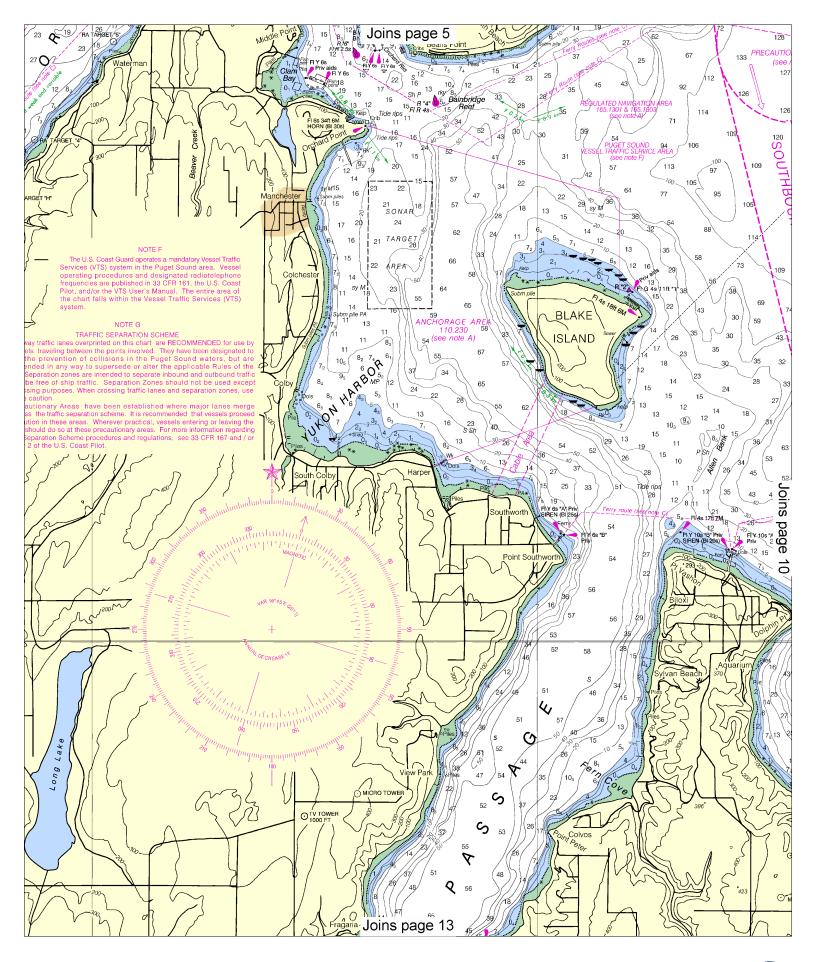
Note: Chart grid lines are aligned with true north.

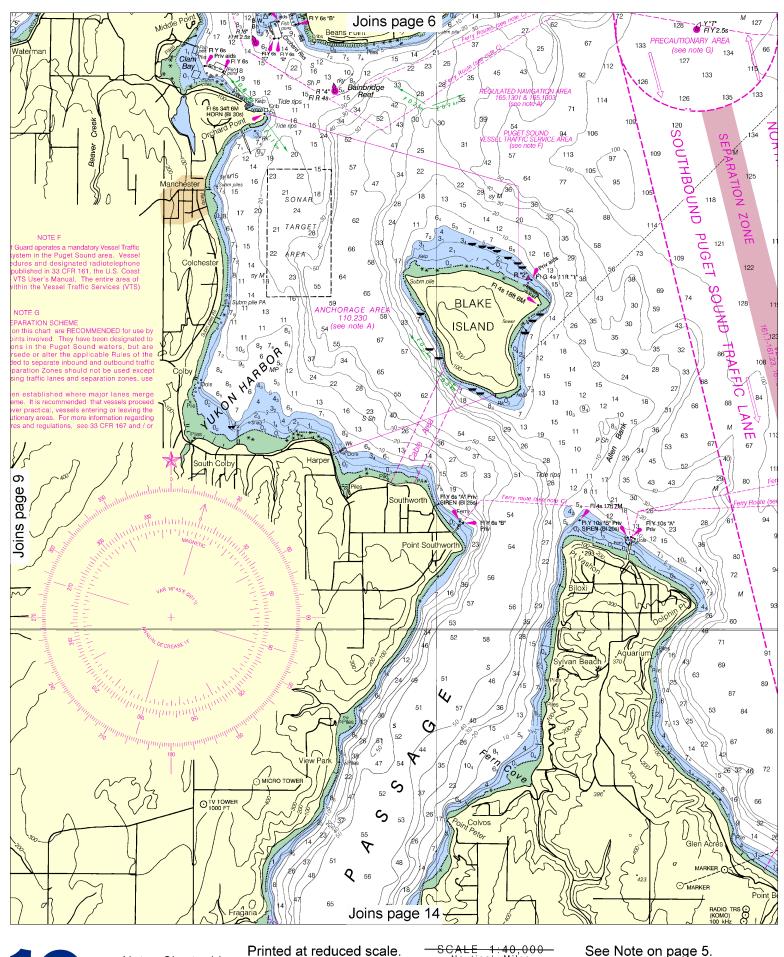
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SCALE 1:40,000
Nautical Miles

Yards

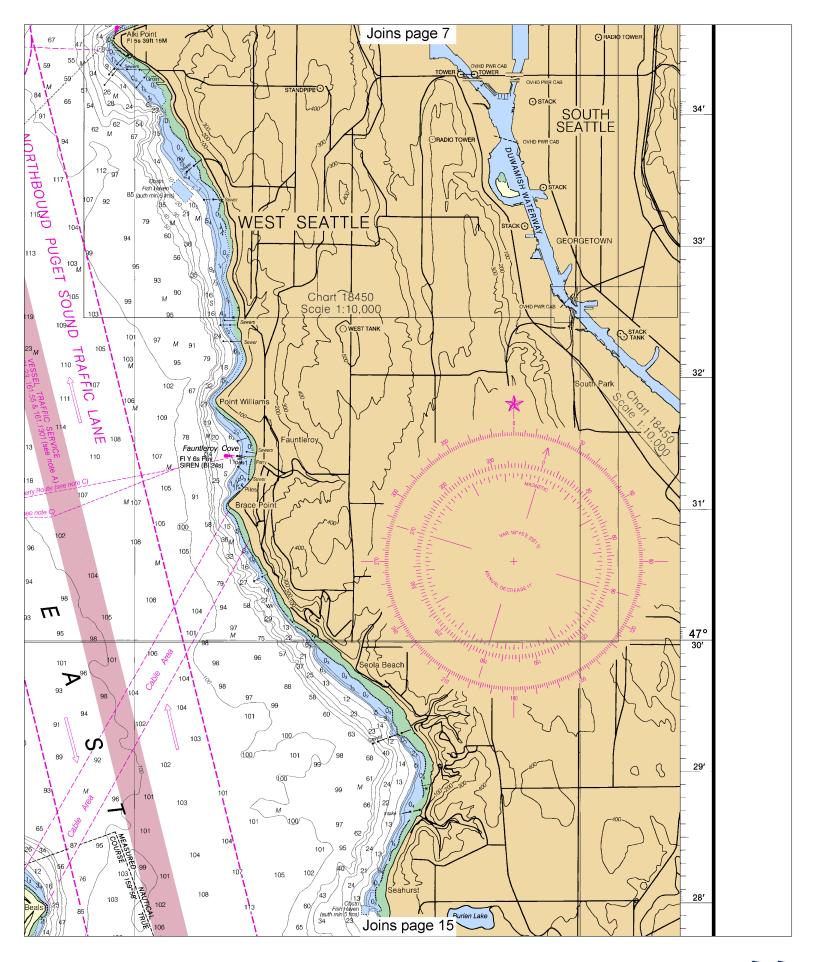
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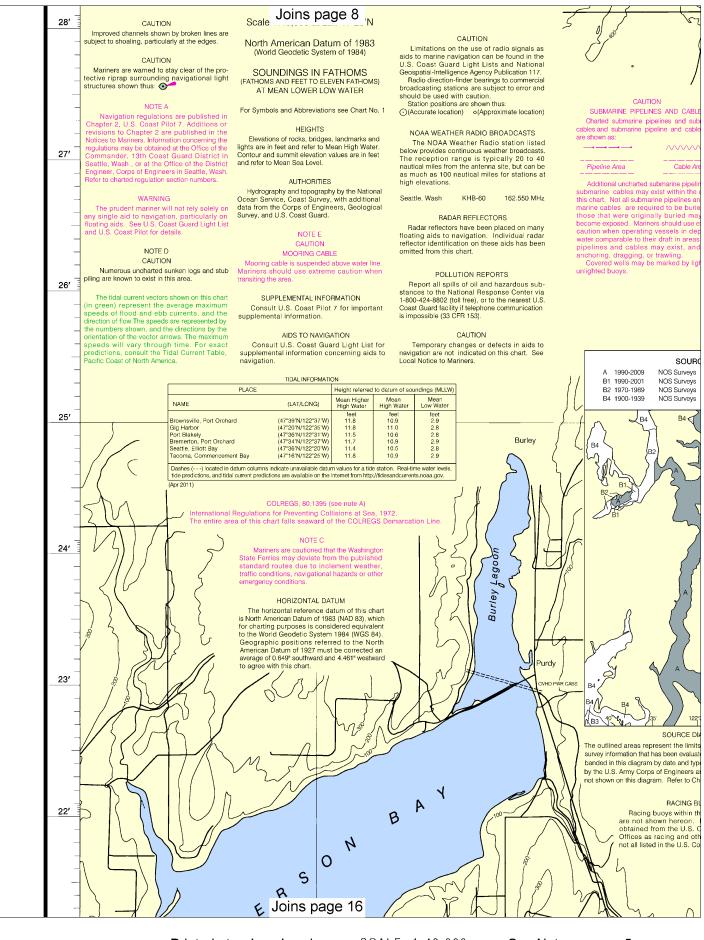




with true north.

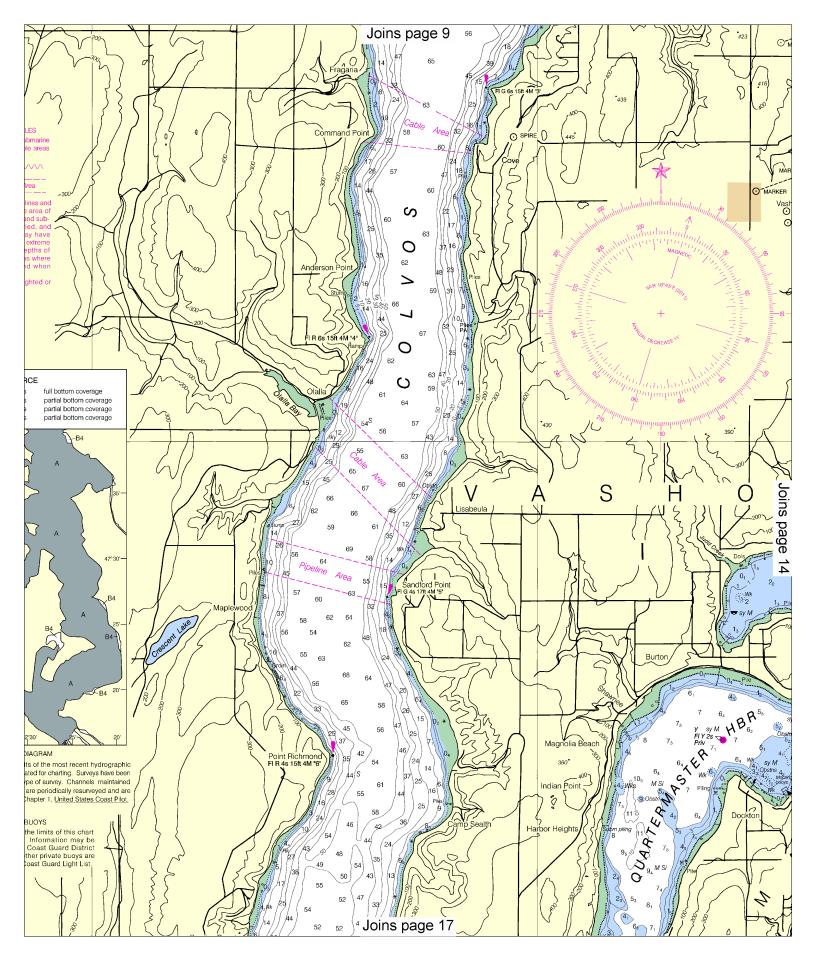


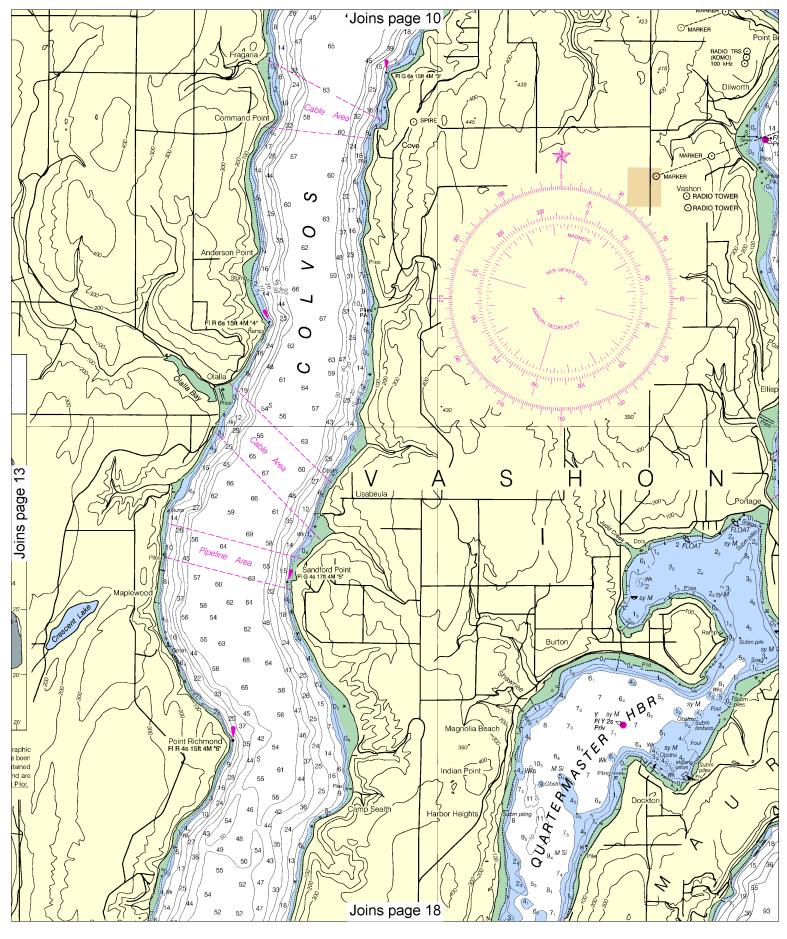




Note: Chart grid lines are aligned with true north.







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Note: Chart grid lines are aligned with true north.

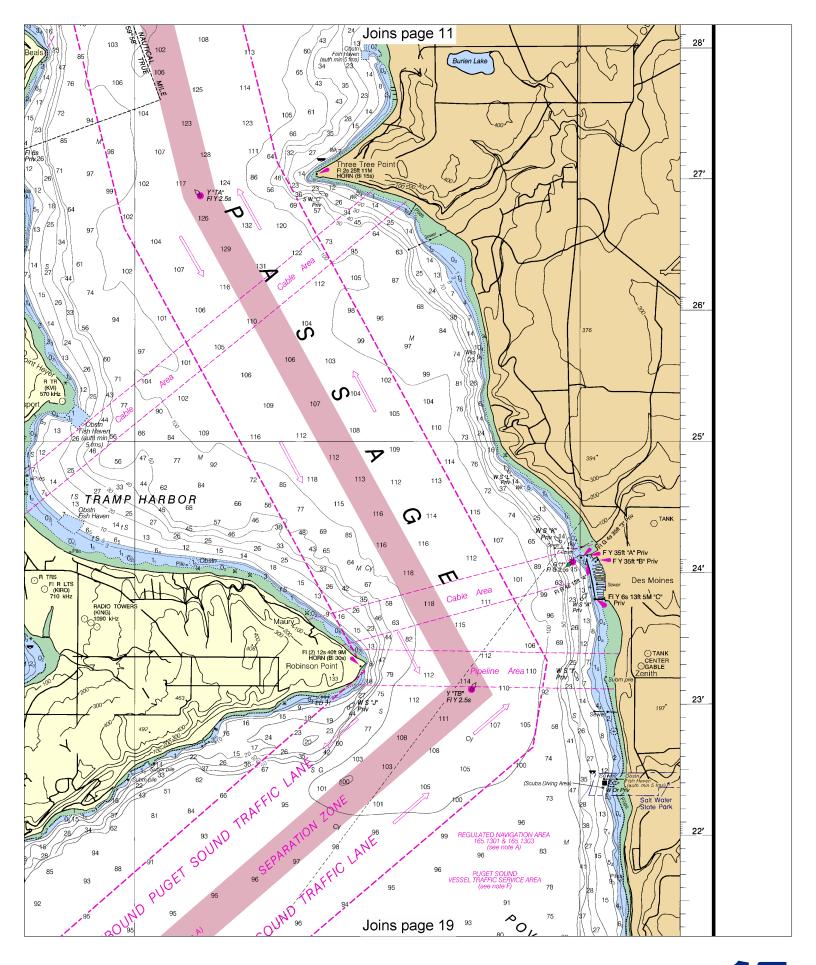
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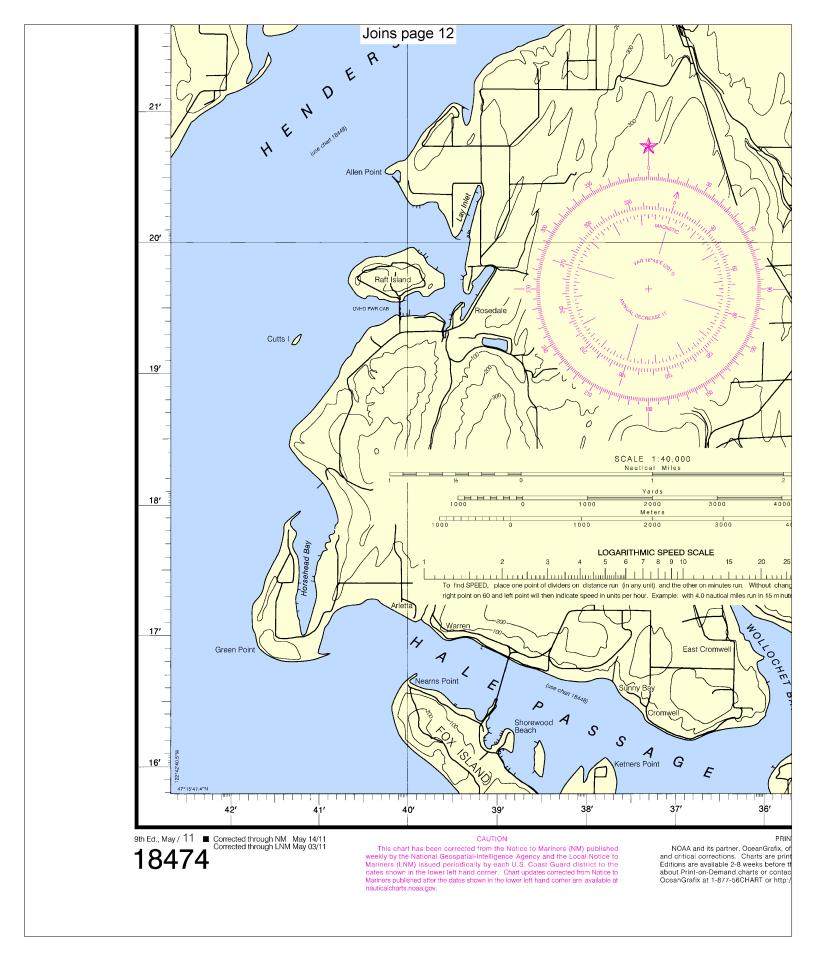
SCALE 1:40,000
Nautical Miles

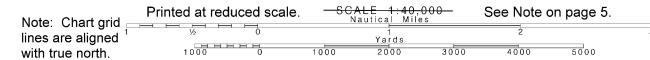
See Note on page 5.

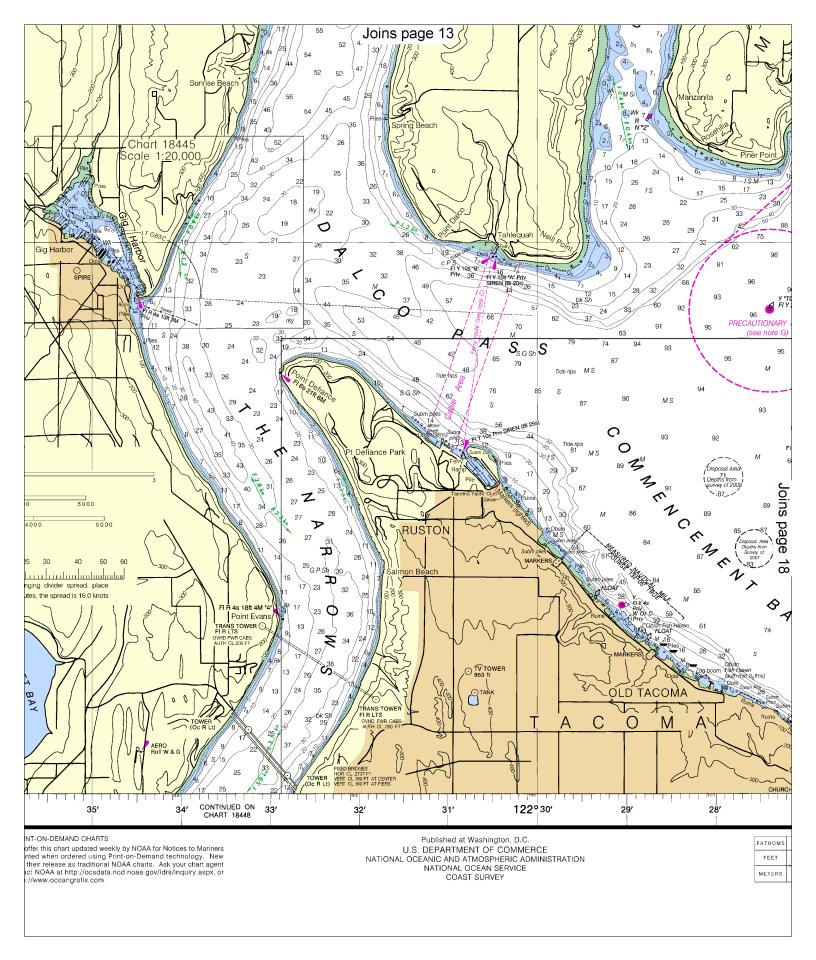
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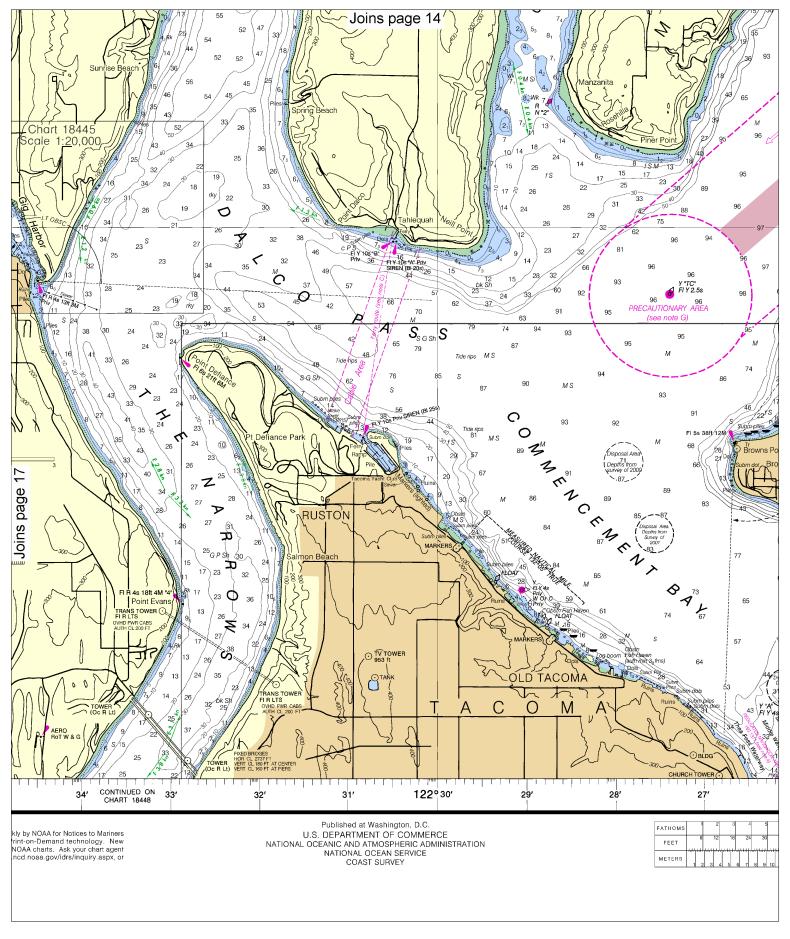
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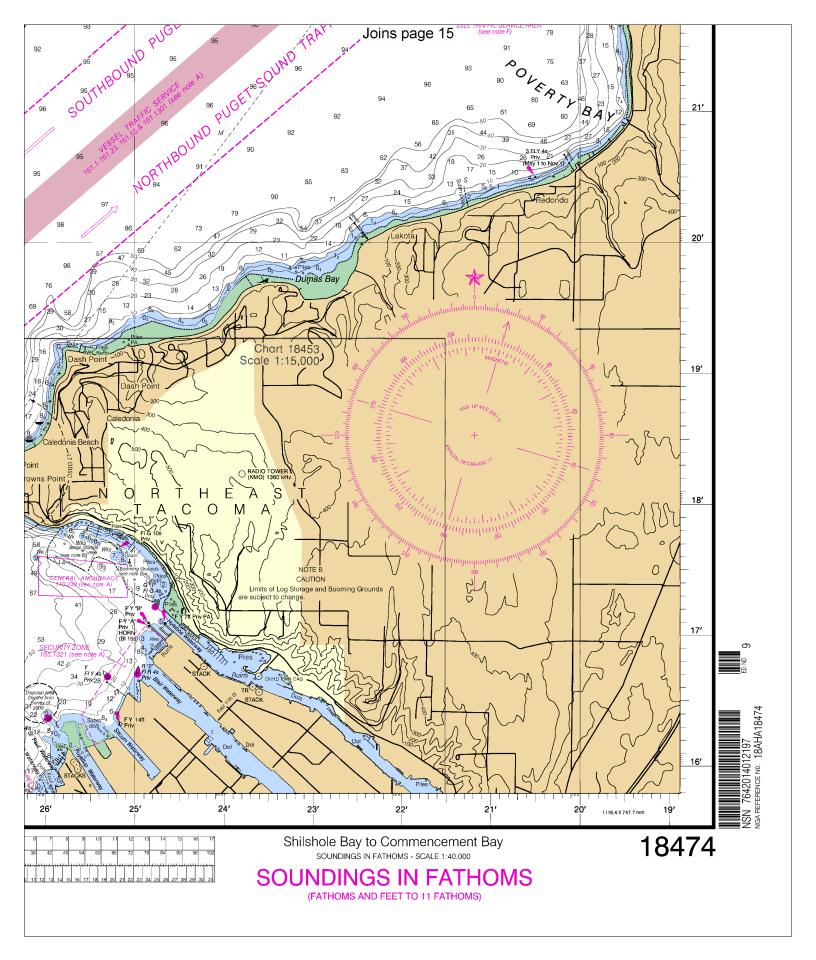




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Printed at reduced scale. SCALE 1:40,000 See Note on page 5.

Note: Chart grid lines are aligned with true north.





VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other

vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here. Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of

Emergency; Number of People on Board.

- · Release transmit button.
- Wait for 10 seconds If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!



NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

http://www.nws.noaa.gov/nwr/

Quick References

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Chart and chart related inquiries and comments — http://ocsdata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs

Chart updates (LNM and NM corrections) — http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html

Coast Pilot online — http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm

Tides and Currents — http://tidesandcurrents.noaa.gov

Marine Forecasts — http://www.nws.noaa.gov/om/marine/home.htm

National Data Buoy Center — http://www.ndbc.noaa.gov/

NowCoast web portal for coastal conditions — http://www.nowcoast.noaa.gov/

National Weather Service — http://www.weather.gov/

National Hurrican Center — http://www.nhc.noaa.gov/

Pacific Tsunami Warning Center — http://ptwc.weather.gov/

Contact Us — http://www.nauticalcharts.noaa.gov/staff/contact.htm



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This Booklet chart has been designed for duplex printing (printed on front and back of one sheet). If a duplex option is not available on your printer, you may print each sheet and arrange them back-to-back to allow for the proper layout when viewing.

